

A Collection of Butterflies from Western Chihuahua, Mexico

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In 1899 Mr. Charles H. T. Townsend collected a fairly sizable lot of butterflies for W. J. Holland in a montane locality in western Chihuahua, a region whose butterflies are still almost unknown. Holland, apparently, was disappointed in the specimens and dismissed them as "quite devoid of novelties, consisting almost wholly of common species of wide distribution." The paper in which he makes this statement (*Ent. News* 11: 332-333, 1900) describes the only form he deemed worthy of mention, *Argynnis nitocris coerulescens*, now known as *Speyeria* (*Speyeria*) *nokomis coerulescens* Holland.

Although Holland was substantially correct in his evaluation, the material is not without interest, and there are a few "novelties" which he did not appreciate. Chermock has subsequently described the *Cercyonis meadii* population as a new subspecies; a new subspecies of *Lycacides melissa* is described herein, striking in appearance and representing a surprising range extension of the species; and in another paper I am describing a remarkable and wholly unexpected (but hardly striking-looking) new species of *Everes*. In addition, the series of the little-known *Paratrytone rhexenor* Godman & Salvin may be the largest in existence—and when Holland penned those crotchety lines, it, too, was undescribed.

The collection is interesting almost as much for what it does not contain as for what it does. Now more is known about southwestern butterflies than in Holland's time and it is possible to list a number of species, common and widespread in the southwest, which Townsend did *not* obtain but which are likely to be present there. Among these are: *Papilio multicaudatus* Kirby, *Neophasia* species (*terlootii* Behr?), *Eurema mexicana* Boisduval, *Euptychia rubricata* Edwards, *Microtia dynas* Ed-

wards, *Chlosyne clada* Hewitson, *Phyciodes texana* Edwards, *Apodemia mormo* Behr, *A. nais* Edwards, *Calcephelis* species, *Erora quaderna* Hewitson, *Callophrys siva* Edwards and *spinetorum* Hewitson, *Celotes*, *Piruna*, *Hylephila phyleus* Drury, *Atalopedes campestris* Boisduval, *Copaeodes aurantiaca* Hewitson, *Pholisora catullus* Fabricius and *mejicana* Reakirt, *Pyrgus philetas* Edwards, *Poanes taxiles* Edwards, *Amblyscirtes* (several species).

Perhaps not all of these species are present in the area, but it is most improbable that none of them is. In brief, these lacunae imply that no use whatever can be made of the "negative information content" of the list which follows.

Holland (*loc. cit.*) located the place where these specimens were taken as "at the head of the Rio Piedras Verdes, in Chihuahua, at an elevation of from 7,100 to 7,300 feet above sea level in the Sierra Madre region." This is approximately at 30° 15' N lat, 108° 15' W long, almost on the Sonora border, and may be found on the map of the American Geographical Society, 1:1 000 000 series, Sonora Sheet NH 12 (prov. ed. 1937, rev. 1938). The specimens themselves bore only the label "Chihuahua/Townsend" and (usually) a date. I have added a fuller label to them all.

To judge from the species taken, the locality is predominantly Upper Sonoran zone. Such species as *Papilio philenor*, *Cercyonis meadii*, *Limenitis astyanax arizonensis* and *Zizula cyna* are regionally good indicators of the zone. The elevation, however, would place this area close to the Transition zone, and certain of the species suggest that some collecting was done in that zone as well: *Lycaeides melissa*, *Callophrys apama*, *Oarisma garita*. A not surprising resemblance of this fauna to that of the mountains of southeastern Arizona (or the reverse) is shown by the presence of such species as *Paramacra xicaque*, *Gyrocheilus patrobas*, *Ochlodes snowi*.

PAPILIONIDAE

Battus philenor Linnaeus. August, September. 8 ♂, 9 ♀.
Papilio polyxenes asterius Stoll. July-September. 7 ♂, 14 ♀.
Papilio crespontes crespontes Cramer. No date. 3.

PIERIDAE

- Nathalis iole* Boisduval. July–September. 21 ♂, 2 ♀.
Eurema (Abaeis) nicippe Cramer. July–September. 16 ♂, 41 ♀.
Eurema proterpia Fabricius. form “proterpia” August–September. 3 ♂, 6 ♀. form “gundlachia” 15 September. 1 ♀.
Phoebis sennae Linnaeus. May (1 ♀), August (4 ♂, 1 ♀), September (3 ♀).
Anteos clorinde nivifera Fruhstorfer. August. 15 ♂, 9 ♀.
Colias (Zerene) cesonia Stoll. July–September. 20 ♂, 21 ♀.
Colias (Colias) eurytheme Boisduval. July–September. 80 ♂, 26 ♀. Includes seven albinic females and one that is cream-colored.

DANAIDAE

- Danaus (Tasitia) gilippus strigosus* Bates. August, September. 7 ♂, 2 ♀.
Danaus (Danaus) plexippus plexippus Linnaeus. July–September. 8 ♂, 2 ♀.
Agraulis vanillae incarnata Riley. August. 1 ♂.

SATYRIDAE

- Euptychia (Cyllopsis) dorothea* Nabokov. 1 June (1 ♂ fresh), 27 June (2 ♀ fresh), 1 July (4 ♂ worn, 3 ♀ more or less fresh), 21 July (1 ♂ very worn), no date (1 ♀). Total, 6 ♂, 6 ♀.
Paramecera xicaque Reakirt. August, September. 3 ♂, 1 ♀.
Cercyonis meadii mexicana Chermock. August, September. 3 ♂, 2 ♀ (the type series).
Gyrocheilus patrobas Hewitson. August, September. 75 ♂, 2 ♀.

NYMPHALIDAE

- Euptoieta claudia* Cramer. August, September. 66.
Speyeria (Speyeria) nokomis coerulescens Holland. September. 22 ♂, 100 ♀ (the type series; additional specimens exist, but have been exchanged or given away and no record kept).
Poladryas minuta nympa Edwards. August, September. 38 ♂, 4 ♀.

- Phyciodes mylitta* Edwards. July, August. 3.
Phyciodes picta Edwards. July, September. 2.
Vanessa atalanta Linnaeus. August, September. 8.
Vanessa cardui Linnaeus. May (1 only), August, September.
25.
Vanessa carye Hübner. August, September. 11.
Limenitis (Limenitis) astyanax arizonensis Edwards. July,
September. 3.
Limenitis (Adelpha) bredowii eulalia Doubleday, Westwood
& Hewitson. August, September. 2.
Anaea (Anaea) aidea Guerin. September. 1 ♀.

LIBYTHEIDAE

- Libytheana carinenta mexicana* Michener. August. 1.

RIODINIDAE

None.

LYCAENIDAE

- Ministrymon leda* Edwards. August. 2 ♀.
Callophrys apama Edwards, subspecies. no date. 1 ♂.
Strymon melinus Hubner, subspecies. July. 1 ♀.
Icaricia acmon Doubleday, Westwood & Hewitson, subspecies.
July-September. 4 ♂.

Lycaeides melissa mexicana, new subspecies.

The male differs markedly from any known *melissa* subspecies (including the population in the mountains of southeastern Arizona) by the darker blue-violet ground and thicker fuscous borders above. On the fore wing this fuscous border is nearly 1 mm thick and on the hind wing nearly half again as much and unites a series of internervural fuscous spots that are never completely free, though sometimes nearly so. All the veins are distally strongly fuscous-lined. On the underside the ground basad of the pm spots is ashy grey-tan, much darker than in most other *melissa* and more brownish tinged. The pm spots

(and basal spots of hind wing) are well developed. Between them and the submarginal border pattern the ground is lightened to almost white, as usual. The subterminal orange on the fore wing is somewhat stronger than in Arizona specimens; on the hind wing it is somewhat thicker. The fuscous terminal spots of the distal series are silvered usually only in their basal halves (in Arizona specimens the silvering nearly eclipses the underlying black spots).

Two of the three females have the orange subterminal band on the fore wing nearly obsolete; in the third it is normally developed. Otherwise, agreement with Arizona females is close: there is a slight basal suffusion of blue on both wings above; the underside is darker, browner than the males—perhaps a little darker than in Arizona females, but not much. The terminal spots below may have less intense silvering than Arizona females but specimens are too few to be sure.

There is no appreciable size difference.

Holotype, male, Upper Rio Piedras Verdes, western Chihuahua, Mexico, ca. 7100–7300 ft, 30° 15' N lat, 108° 15' W long, 1 September 1899 (C. H. T. Townsend). *Paratypes*, 40 ♂, 3 ♀, same locality and collector, dated as follows: 30 May (3 ♂), May (6 ♂, 1 ♀), 21 July (1 ♂), 30 August (1 ♂), 1 September (2 ♂), 11 September (2 ♂), 14 September (3 ♂, 1 ♀), 16 September (1 ♂), 17 September (1 ♂), 18 September (1 ♂), 19 September (3 ♂), September (12 ♂, 1 ♀), no date (4 ♂). *Holotype* and *paratypes*, C.M. Ent. type series no. 510.

Hemiargus (Echinargus) isola alce Edwards. July–September. 11 ♂, 6 ♀.

Everes new species. September. 1 ♂. This is being described in another paper.

Leptotes marina Reakirt. July, September. 1 ♂, 2 ♀.

Celastrina pseudargiolus cinerea Edwards. July–September. 13 ♂.

Zizula cyna Edwards. September. 1 ♂.

Brephidium exilis exilis Boisduval. June. 1 ♀.

HESPERIIDAE¹

- Autochton pseudocellus** Coolidge & Clemence. June, July.
2 ♂, 1 ♀.
- Autochton cellus** Boisduval & LeConte. June, July. 5 ♂, 2 ♀.
- Erynnis tristis** Boisduval. June, August, September. 2 ♂, 1 ♀.
- Erynnis propertius** Scudder & Burgess (?). May, June, September.
4 ♂, 1 ♀.
- Erynnis funeralis** Scudder & Burgess. August, September.
5 ♂, 1 ♀.
- Pyrgus communis albescens** Plötz. July, September. 8 ♂, 2 ♀.
- Oarisma garita** Reakirt. June, July. 13 ♂, 3 ♀.
- Hesperia woodgatei** Williams. September. 1 ♂.
- Ochlodes snowi snowi** Edwards. July, September. 2 ♂, 1 ♀.
- Paratrytone rhexenor** Godman & Salvin. May–September.
15 ♂, 9 ♀.
- Atrytonopsis deva** Edwards. June. 1 ♂.
- Amblyscirtes fimbriata** Plötz (?). June, July. 1 ♂, 1 ♀.

¹ Identifications by Lee D. Miller.